



FIG. 1A

OUGHTA COST SYSTEM

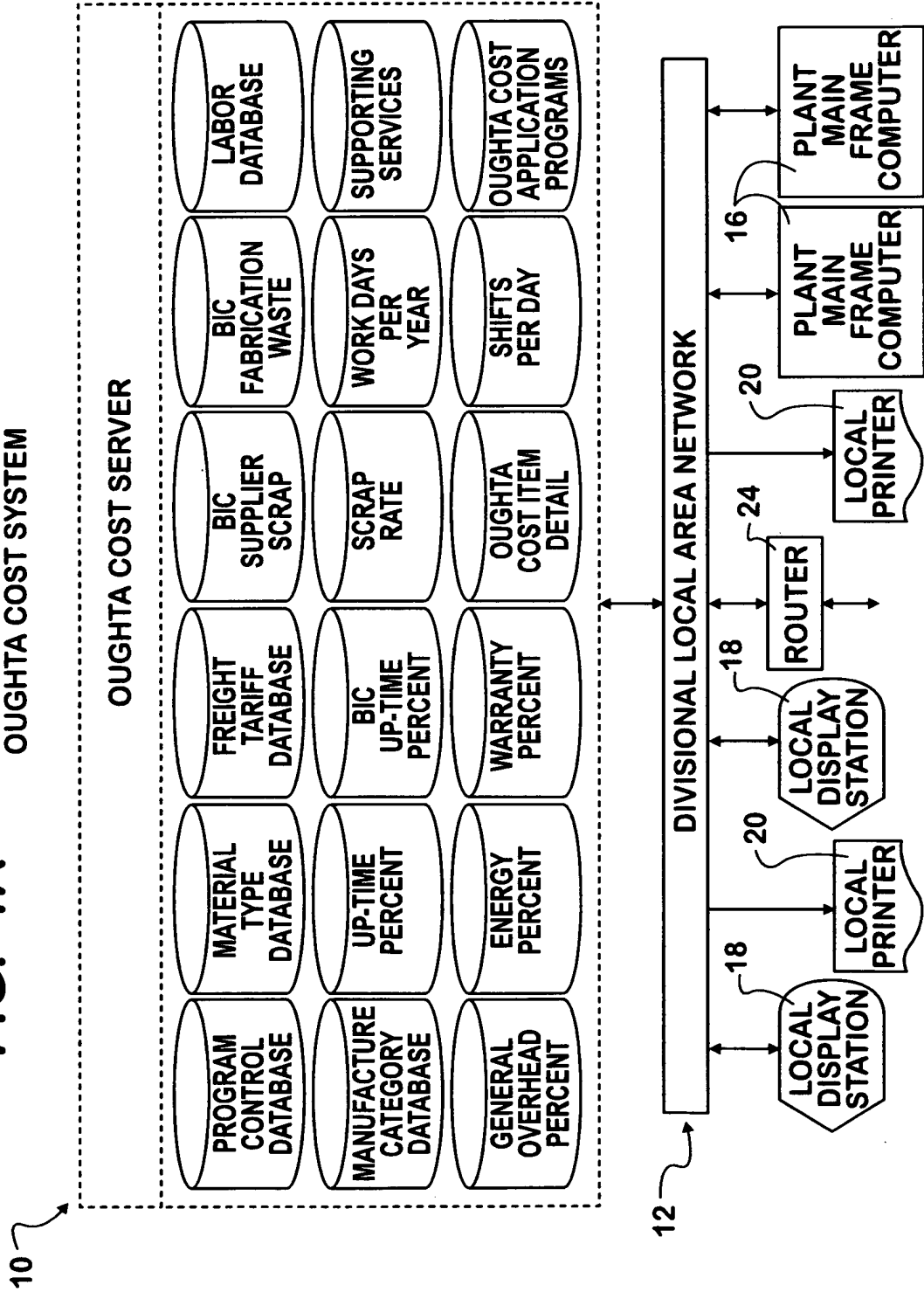
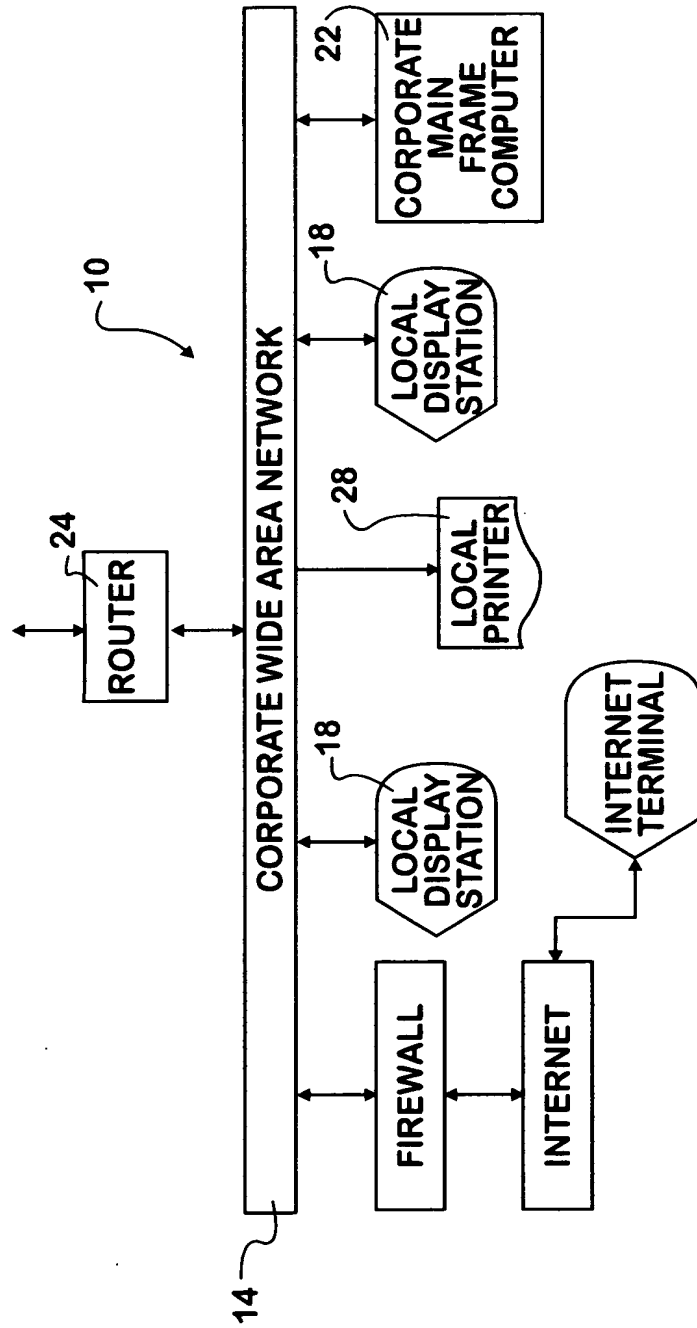


FIG. 1B



**Oughta Cost System**

*Oughta Cost Search* **New Crankshaft**

*Existing Oughta Cost Studies*

Program#	Description	Status	Owner
01122000001	New Crankshaft	Public	Ray Goss
10292000002	Machine New Head	Private	Bill Warren
01222001004	New Core Assembly Process	Public	Gary Denklau

*Name of New Oughta Cost Study*

**Copy An Existing Study** **Create New Study**

Open  
Study  
Reports  
Exit

FIG. 2

Material		Program #02010100001		Component:Shaft		Component#100		Status:Public	
<input checked="" type="checkbox"/> Cost Components -Material -Capital -Labor -Manufacturing -Overhead Reports Home Exit		<div> <div>Material Type</div> <div>Supplier Scrap:</div> <div>Fabrication Waste:</div> <div> <div>Steel Forging</div> <div>Fine Blanked Steel</div> <div>Copper</div> <div>Tin</div> <div>Plastic</div> <div>Die Cast Aluminum</div> <div>Brass Bar Stock</div> <div>Plastic</div> <div>Bronze Bar Stock</div> <div>Nitralloy Steel Bar</div> </div> </div>							
Freight Origin Destination Mode		Weight Needed Material Cost Cost		Returnable Containers Dunnage		Rates/CWT			
Materials Table									
Material Code		Unit Of Measure		Category		Description			
Comments									

**FIG. 3**







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Material		Program #02010100001		Component: Shaft		Component#100		Status: Public	
<input checked="" type="checkbox"/>	Material Type	Steel Forging							
	Supplier Scrap:	5.00%							
	Fabrication Waste:	5.00%							
Cost Components		Freight		Total Weight Needed		Returnable Containers			
-Material	Origin	New York		111		Dunnage			
-Capital	Destination	California							
-Labor	Mode								
-Manufacturing									
-Overhead									
Reports									
Home									
Exit									
		Truck Load							
		Less Than Truck L							
		Rail							
		Boat							
Materials Table									
Material Code		Unit Of Measure		Category		Description			
1-112-A		Ton		Forging		Steel Forging			
Comments									

FIG. 6



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Material		Program #02010100001		Component:Shaft		Component#100		Status:Public	
<input checked="" type="checkbox"/>	Material Type	Steel Forging							
	Supplier Scrap:	5.00%							
	Fabrication Waste:	5.00%							
Cost Components									
-Material	Freight								
-Capital	Origin	New York							
-Labor	Destination	California							
-Manufacturing	Mode	Truck Load							
-Overhead	Total Weight Needed	111							
Reports	Total Material Cost	\$ 51.06							
Home	Freight Cost	\$ 1.11							
Exit	Rates/CWT	\$ 1.00							
	Returnable Containers	Y							
Dunnage									
Materials Table									
Material Code		Unit Of Measure		Category		Description			
1-112-A		Ton		Forging		Steel Forging			
						Crankshaft for 2003 model year V8			
Comments									
This study has only one component.									

FIG. 7



<b>Labor</b>  Cost Components -Material -Capital -Labor -Manufacturing -Overhead Reports Home Save & Exit	<b>Program #01122000001</b>		<b>Component: Shaft</b>		<b>Component#123456</b>		<b>Status: Public</b>	
	<b>Supporting Services:</b> 0%		<b>Region:</b> North					
	<b>Machining Type:</b> Transfer Line		<b>Skill Level:</b> Standard Machining					
	<b>Additional Labor \$:</b> 0.00							

Employee Type	Number Required	Operation# (OP#)	Default Labor Rate	Employee Benefit (% of Labor Rate)	Employee Benefits
<b>DIRECT LABOR</b>					
Machine Operators	3	10	\$ 11.00	50 %	\$ 5.50
Machine Operators	3	20	\$ 11.00	%	\$ 3.50
Assembly Test	0		\$ 9.00	%	\$ 3.50
<b>INDIRECT LABOR</b>					
Material Handling	5	10	\$ 8.00	%	\$ 4.00
Shipping	2	30	\$ 11.00	%	\$ 4.00
Receiving	2	05	\$ 8.00	%	\$ 4.00
Line Stocking	1	10	\$ 7.00	%	\$ 3.50
Material Scheduler	25		\$ 6.00	%	\$ 3.00
Inspection	25	20	\$ 8.00	%	\$ 4.00
Quality	25	20	\$ 9.00	%	\$ 4.50
Supervisor	1		\$ 14.00	%	\$ 4.00

FIG. 8

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<b>Capital</b>	Program #01122000003	Component: Shaft	Component#123456	Status: Public
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**General Capital**

Building Expansion	Qty 1	Item Category Building	Depreciation 30 yrs	Capital\$ \$200,000

**Add General Item**

**Machining Capital**

Qty	Op#	Description	Category	Capital\$	Capital Depreciation	Tooling\$	Tooling Depreciation
1	10	Rough Machining	Machine Tool	\$25,000	5 yrs		
	10	Cutters	Tooling			\$800	1 yrs

**Add Machining Item**

**Comments**

Cancel
Help

FIG. 9

Manufacturing		Program #01122000001		Component:Shift		Component#123456		Status:Public																																					
<input checked="" type="checkbox"/>	Manufacturing Category	Transfer Line																																											
Uptime Current																																													
Uptime World Class																																													
Scrap Rate																																													
Volume																																													
		50%		per																																									
		51%																																											
		52%																																											
		53%																																											
		54%																																											
		100%																																											
		Available		Manufacturing Time																																									
Work Days per Year																																													
Work Shifts per Day																																													
Work Hours per Shift																																													
Component Manufacturing Utilization																																													
<table border="1"> <thead> <tr> <th colspan="6">Manufacturing Time</th> </tr> <tr> <th>Requires Manpower</th> <th>Equipment#</th> <th>Op#</th> <th>Unit of Measure</th> <th>Time</th> <th>Calculated Capacity</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="6">Add Manufacturing Time Element</td> </tr> </tbody> </table>										Manufacturing Time						Requires Manpower	Equipment#	Op#	Unit of Measure	Time	Calculated Capacity	<input type="checkbox"/> Yes <input type="checkbox"/> No						<input type="checkbox"/> Yes <input type="checkbox"/> No						<input type="checkbox"/> Yes <input type="checkbox"/> No						Add Manufacturing Time Element					
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FIG. 10



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<b>Manufacturing</b>		<b>Program #01122000001</b>		<b>Component:Shift</b>		<b>Component#123456</b>		<b>Status:Public</b>	
<input checked="" type="checkbox"/>		<b>Manufacturing Category</b>							
Cost Components		<b>Uptime Current</b>							
-Material		<b>Uptime World Class</b>							
-Capital		<b>Scrap Rate</b>							
-Labor		<b>Volume</b>							
-Manufacturing		<b>Work Days per Year</b>							
-Overhead		<b>Work Shifts per Day</b>							
Reports		<b>Work Hours per Shift</b>							
Home		<b>Component Manufacturing Utilization</b>							
		<b>Transfer Line</b>							
		<b>50%</b>							
		<b>70%</b>							
		<b>75%</b>							
		<b>80%</b>							
		<b>85%</b>							
		<b>90%</b>							
		<b>95%</b>							
		<b>100%</b>							
		<b>per</b>							
		<b>Manufacturing Time</b>							
		<b>Component</b>							
		<b>Manufacturing Utilization</b>							
		<b>Manufacturing Time</b>							
		<b>Requires Manpower</b>							
		<b>Equipment#</b>							
		<b>Op#</b>							
		<b>Unit of Measure</b>							
		<b>Time</b>							
		<b>Calculated Capacity</b>							
		<b>Add Manufacturing Time Element</b>							

FIG. 11

<b>Manufacturing</b>		<b>Program #01122000001</b>		<b>Component:Shift</b>		<b>Component#123456</b>		<b>Status:Public</b>	
<input checked="" type="checkbox"/>		<b>Manufacturing Category</b> Uptime Current <input type="text"/> <b>Transfer Line</b> <input type="text"/> Uptime World Class <input type="text"/> Scrap Rate <input type="text"/> Volume <input type="text"/> per <input type="text"/> 5.00% <input type="text"/> 5.10% <input type="text"/> 5.20% <input type="text"/> 5.30% <input type="text"/> 5.40% <input type="text"/> 5.50% <input type="text"/> 5.60% <input type="text"/> 5.70% <input type="text"/> 5.80% <input type="text"/> 5.90% <input type="text"/> <b>Manufacturing Time</b> Work Days per Year <input type="text"/> Work Shifts per Day <input type="text"/> Work Hours per Shift <input type="text"/> <b>Component</b> <b>Manufacturing Utilization</b> <input type="text"/>							
Cost Components -Material -Capital -Labor -Manufacturing -Overhead Reports Home									
<b>Manufacturing Time</b>									
Requires Manpower <input type="checkbox"/> Yes <input type="checkbox"/> No		Equipment# <input type="text"/>		Op# <input type="text"/>		Unit of Measure <input type="text"/>		Time <input type="text"/>	
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
Add Manufacturing Time Element									
Calculated Capacity <input type="text"/>									

FIG. 12

Manufacturing		Program #01122000001		Component:Shift		Component#123456		Status:Public			
<input checked="" type="checkbox"/>	Manufacturing Category	Transfer Line		▼							
	Uptime Current	50%		▼							
	Uptime World Class	90%		▼							
	Scrap Rate	0%		▼							
	Volume	20,000		per Year		▼					
		Available Manufacturing Time									
	Work Days per Year	240									
	Work Shifts per Day	2									
	Work Hours per Shift	8									
	Component Manufacturing Utilization										
<div> <div>Cost Components</div> <div> <div>-Material</div> <div>-Capital</div> <div>-Labor</div> <div>-Manufacturing</div> <div>-Overhead</div> <div>Reports</div> <div>Home</div> </div> </div>											
Manufacturing Time											
Requires Manpower		Equipment#		Op#		Unit of Measure		Time		Calculated Capacity	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		12345		05		▼					
<input type="checkbox"/> Yes <input type="checkbox"/> No						sec min hour					
<input type="checkbox"/> Yes <input type="checkbox"/> No											
Add Manufacturing Time Element											

FIG. 13

Manufacturing		Program #01122000001		Component: Shaft		Component#123456		Status: Public																									
<input checked="" type="checkbox"/>	Cost Components -Material -Capital -Labor -Manufacturing -Overhead Reports Home	<div> <div>           Manufacturing Category            Uptime Current <input type="text" value="50%"/>            Uptime World Class <input type="text" value="90%"/>            Scrap Rate <input type="text" value="0%"/>            Volume <input type="text" value="20,000"/> per Year <input type="text" value=""/> </div> <div>           Transfer Line <input type="text" value=""/> </div> </div> <div>           Available Manufacturing Time            Work Days per Year <input type="text" value="240"/>            Work Shifts per Day <input type="text" value="2"/>            Work Hours per Shift <input type="text" value="8"/>            Component Manufacturing Utilization <input type="text" value="50%"/> </div>																															
<div> <div> <b>Manufacturing Time</b> <table border="1"> <thead> <tr> <th>Requires Manpower</th> <th>Equipment#</th> <th>Op#</th> <th>Unit of Measure</th> <th>Time</th> <th>Calculated Capacity</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</td> <td>123456</td> <td>05</td> <td>sec</td> <td>80</td> <td>86,400</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</td> <td>246810</td> <td>10</td> <td>sec</td> <td>80</td> <td>86,400</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</td> <td>357159</td> <td>20</td> <td>min</td> <td>1.3</td> <td>86,400</td> </tr> </tbody> </table> </div> <div>           Add Manufacturing Time Element         </div> </div>										Requires Manpower	Equipment#	Op#	Unit of Measure	Time	Calculated Capacity	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	123456	05	sec	80	86,400	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	246810	10	sec	80	86,400	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	357159	20	min	1.3	86,400
Requires Manpower	Equipment#	Op#	Unit of Measure	Time	Calculated Capacity																												
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	123456	05	sec	80	86,400																												
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	246810	10	sec	80	86,400																												
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	357159	20	min	1.3	86,400																												

FIG. 14





OverHead		Program #01122000001		Component: Shaft		Component#123456		Status: Public																													
Depreciation																																					
Asset Class	# of Items	Total Capital	Depreciation Years	Annual Depreciation	Component Rate	Annual Depreciation Contributed by Component																															
Building	1	\$200,000	30	\$6,667	50 %			\$3,334																													
Tooling	10	\$800	1	\$800	100 %			\$800																													
Machine Tools	1	\$25,000	5	\$5,000	70 %			\$3,500																													
TOTALS		\$225,800		\$12,467				\$7,634																													
<div style="display: flex; justify-content: space-between;"> <div> <p>Startup Costs <span style="margin-left: 20px;">\$20,000</span></p> <p>Engineering Support <span style="margin-left: 20px;">\$10,000</span></p> <p>Warranty Cost (% of Sales) <span style="margin-left: 20px;">0.1%</span></p> </div> <div> <p><b>Additional Expenses</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Cost Category</th> <th>Cost Description</th> <th>Cost (\$)</th> <th>Occurrence</th> </tr> </thead> <tbody> <tr> <td>Pershable Tooling</td> <td></td> <td></td> <td></td> </tr> <tr> <td>MRO</td> <td></td> <td></td> <td></td> </tr> <tr> <td>General Overhead</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Energy</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="4">Add Cost Category</td> </tr> </tbody> </table> </div> </div>										Cost Category	Cost Description	Cost (\$)	Occurrence	Pershable Tooling				MRO				General Overhead				Energy				Other				Add Cost Category			
Cost Category	Cost Description	Cost (\$)	Occurrence																																		
Pershable Tooling																																					
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Energy																																					
Other																																					
Add Cost Category																																					
Comments																																					

FIG. 16



Reports	
<div><input checked="" type="checkbox"/> Cost Components<ul style="list-style-type: none"><li>-Material</li><li>-Capital</li><li>-Labor</li><li>-Manufacturing</li><li>-Overhead</li><li>Reports</li><li>Home</li><li>Exit</li></ul></div>	<div><div><input checked="" type="checkbox"/> Standard Report Package</div><div><input checked="" type="checkbox"/> Material <input type="checkbox"/> Labor <input type="checkbox"/> Capital <input type="checkbox"/> Manufacturing <input type="checkbox"/> Overhead <input checked="" type="checkbox"/> Summary</div><div><div>Program: Program Description: Component Control#: Component: Selected Items:</div><div><div><div>▼</div><div>1201200001 10292000002 01222001004 02102001001</div></div><div></div></div></div><div><div></div><div><div>▼</div><div></div></div><div><div>Cancel</div><div>Help</div></div></div></div>

FIG. 17

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**FIG. 18**

